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(43) Date of application publication: 27.04.01	(72) Inventor: KOBAYASHI OKIHIRO MIYAHARA NOBUHIRO HATTORI YUTAKA PARITZKY ALEXANDER KOTS ALEXANDER
(84) Designated contracting states:	(74) Representative:

(54) **MOBILE PHONE**

(57) Abstract:

**PROBLEM TO BE SOLVED:** To provide a mobile phone that has an excellent receiving characteristics even when the mobile phone is in use at a position apart from a mouth of a talker.

**SOLUTION:** The mobile phone that has a 1st use state where the mobile phone is used at a position close to a face and a 2nd use state where the mobile phone is used at a position apart from the face, is provided with a sensor 55 detecting a distance from the face and with an optical microphone that has a diaphragm 2 vibrated by a sound pressure, a light source 3 emitting a light beam the diaphragm 2, a photo detector 5 that receives a reflected light of the light beam emitted to the diaphragm 2 and outputs a signal corresponding to the vibration of the diaphragm 2, and a light source drive circuit 13 that drives the light source 3 by supplying a prescribed current to the light source 3, and a negative feedback circuit 100 that supplies part of a signal outputted from the photo detector 5 to the light source drive circuit 13 as a negative feedback signal. The directivity characteristics of the optical microphone is controlled by changing the quantity of the negative feedback signal according to the sensor signal denoting the distance.

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